

What is claimed is:

1. A electric motor comprising:

a stator core;

a rotor held by a rotary shaft with a predetermined void between

said stator core and the rotor;

a bobbin-shaped insulator mounted on said stator core provided with a flange portion on at least one of outer diameter side and inner diameter side, and wound with a stator winding;

a terminal holder fixed to said flange portion of said bobbin-shaped insulator and provided with a cylinder portion arranged so as to surround said rotary shaft; and

annular conductors and insulating layers arranged on outer diameter side of the cylinder portion of said terminal holder and laminated alternately in axial direction;

wherein said annular electric conductors are provided with a connecting portion for connecting terminal lead wires of said stator winding corresponding to lead positions of said terminal lead wires.

2. The electric motor according to claim 1, wherein the flange portion of the bobbin-shaped insulator has an engaging window, the terminal holder has engaging claws for engaging with the engaging window, and the terminal holder is held by and fixed to the bobbin-shaped insulator by engaging the engaging claws with the engaging window.

3. The electric motor according to claim 1, wherein the flange portion of the bobbin-shaped insulator and a mounting portion of the terminal holder are provided with screw portions, and the terminal holder is held by and fixed to the bobbin-shaped insulator by fitting the screw portions with screws.

4. The electric motor according to claim 1, wherein the annular

electric conductors and the insulating layers laminated alternately are held by a holding portion of the terminal holder through an elastic member.

5 5. The electric motor according to claim 4, wherein the elastic member is formed integrally with the terminal holder.

6. A electric motor comprising:

a stator core;

a rotor held by a rotary shaft with a predetermined void between said stator core and the rotor;

10 a bobbin-shaped insulator mounted on said stator core provided with a flange portion on at least one of outer diameter side and inner diameter side, and wound with a stator winding;

15 a terminal holder fixed to said flange portion of said bobbin-shaped insulator and provided with a cylinder portion arranged so as to surround said rotary shaft in which plural partition walls and grooves are alternately formed in radial direction on outer diameter side of said cylinder portion; and

annular electric conductors stored in the grooves on outer diameter side of said cylinder portion of said terminal holder;

20 wherein said annular electric conductors are provided with a connecting portion for connecting terminal lead wires of said stator winding corresponding to lead positions of said terminal lead wires.

25 7. The electric motor according to claim 6, wherein the flange portion of the bobbin-shaped insulator has an engaging window, the terminal holder has engaging claws for engaging with the engaging window, and the terminal holder is held by and fixed to the bobbin-shaped insulator by engaging the engaging claws with the engaging window.

30 8. The electric motor according to claim 6, wherein the flange

portion of the bobbin-shaped insulator and a mounting portion of the terminal holder are provided with screw portions, and the terminal holder is held by and fixed to the bobbin-shaped insulator by fitting the screw portions with screws.

5           9. A electric motor comprising:

a stator core;

a rotor held by a rotary shaft with a predetermined void between said stator core and the rotor;

10           a bobbin-shaped insulator mounted on said stator core provided with a flange portion on at least one of outer diameter side and inner diameter side, and wound with a stator winding; and

annular conductors and insulating layers arranged on outer diameter side of said circular arc-shaped flange portions of said bobbin-shaped insulator and are laminated alternately in axial direction;

15           wherein said annular electric conductors are provided with a connecting portion for connecting terminal lead wires of said stator winding corresponding to lead positions of said terminal lead wires.

20           10. The electric motor according to claim 9, wherein the annular electric conductors and the insulating layers laminated alternately are held by a holding portion of the bobbin-shaped insulator through an elastic member.

25           11. The electric motor according to claim 10, wherein the elastic member is formed integrally with the terminal holder or the bobbin-shaped insulator.